


# Electrical Safety of General Households in Japan

The background of the slide is a scenic photograph of Mount Fuji, Japan's highest mountain, reflected in a calm lake. The sun is setting behind the mountain, creating a warm orange and yellow glow across the sky and water. The mountain's peak is partially obscured by a soft, white mist or snow. The overall mood is peaceful and serene.

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## Outlines of Electrical Safety Inspection Associations in Japan

There are 10 regional Electrical Safety Inspection Associations in Japan, whose primary services/activities are as follows:

- Survey service for electrical facilities/equipment for general use
- Safety management service for electrical facilities/equipment for private use
- Public relations (communication) activities on electrical safety for electricity users



## Laws and regulations on electricity

Electricity industry as a whole

### Electricity Business Act

- Requires reasonable and proper operation of electricity business
- Protects interests of electricity users
- Ensures public safety
- Defines classifications of electrical facilities and equipment
- Stipulates requirements for proper electrical safety

Electrical engineering companies/Manufacturers/  
Maintenance administrators

### Electrical Equipment Technical Standards

- Stipulates specific technical standards for electrical safety

### Electrical Appliances and Materials Safety Act

- Regulates manufacturing and sales of electrical appliances
- Stipulates requirements for ensuring safety of electrical appliances

### Electricians Act

- Stipulates requirements for qualification of electricians engaged in electrical work

### Fair Electric Business Practices Act

- Stipulates requirements for ensuring fair business practices of electrical work

## Classification of electrical facilities/equipment pursuant to Electricity Business Act

Electrical facilities/equipment

Factories, buildings, power-company facilities, etc.

General households, shops, etc.

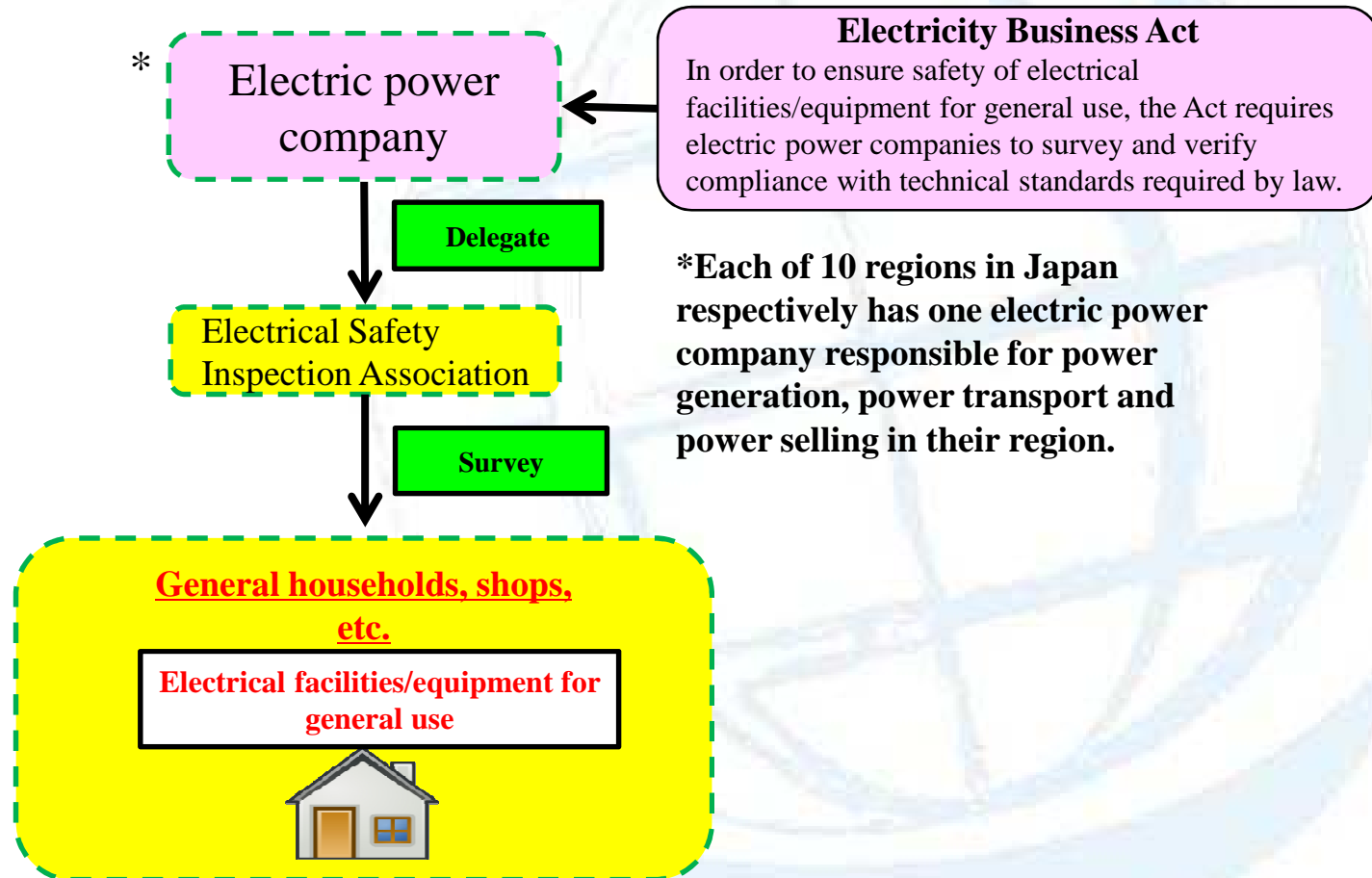


Electrical facilities/equipment for business use



Electrical facilities/equipment for general use

## Electrical safety service for general households required under Electricity Business Act



## Classification of Electrical safety service for general households defined in Electricity Business Act

### Periodic survey

Periodically surveys existing electrical facilities/equipment for general use every four years (or every year depending on the type of facility/equipment)

### Construction completion survey

Conducted when any electrical facility/equipment for general use is installed or alteration work is completed

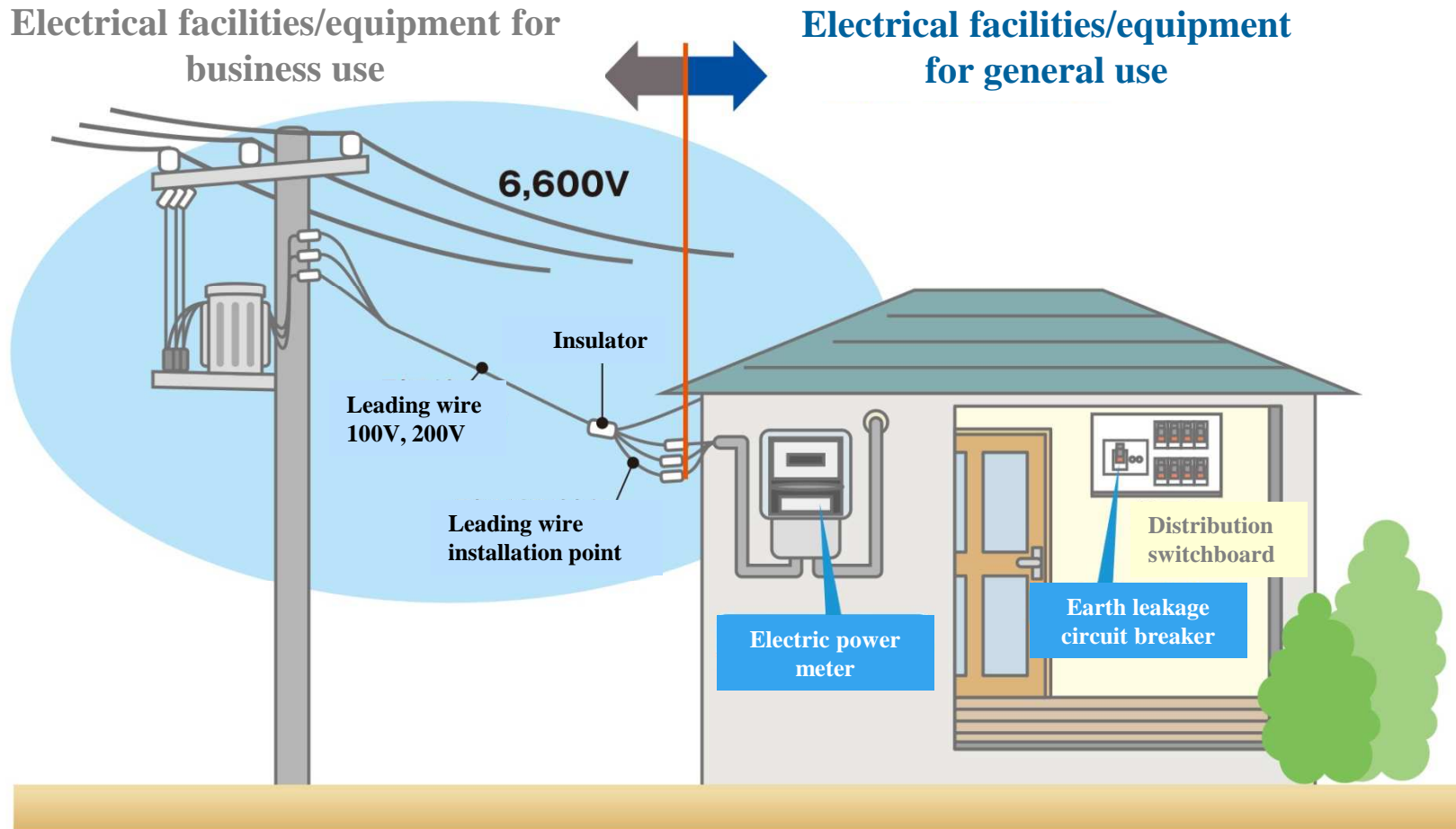
[Reference information]

Number of surveys conducted by Chugoku Electrical Safety Inspection Association

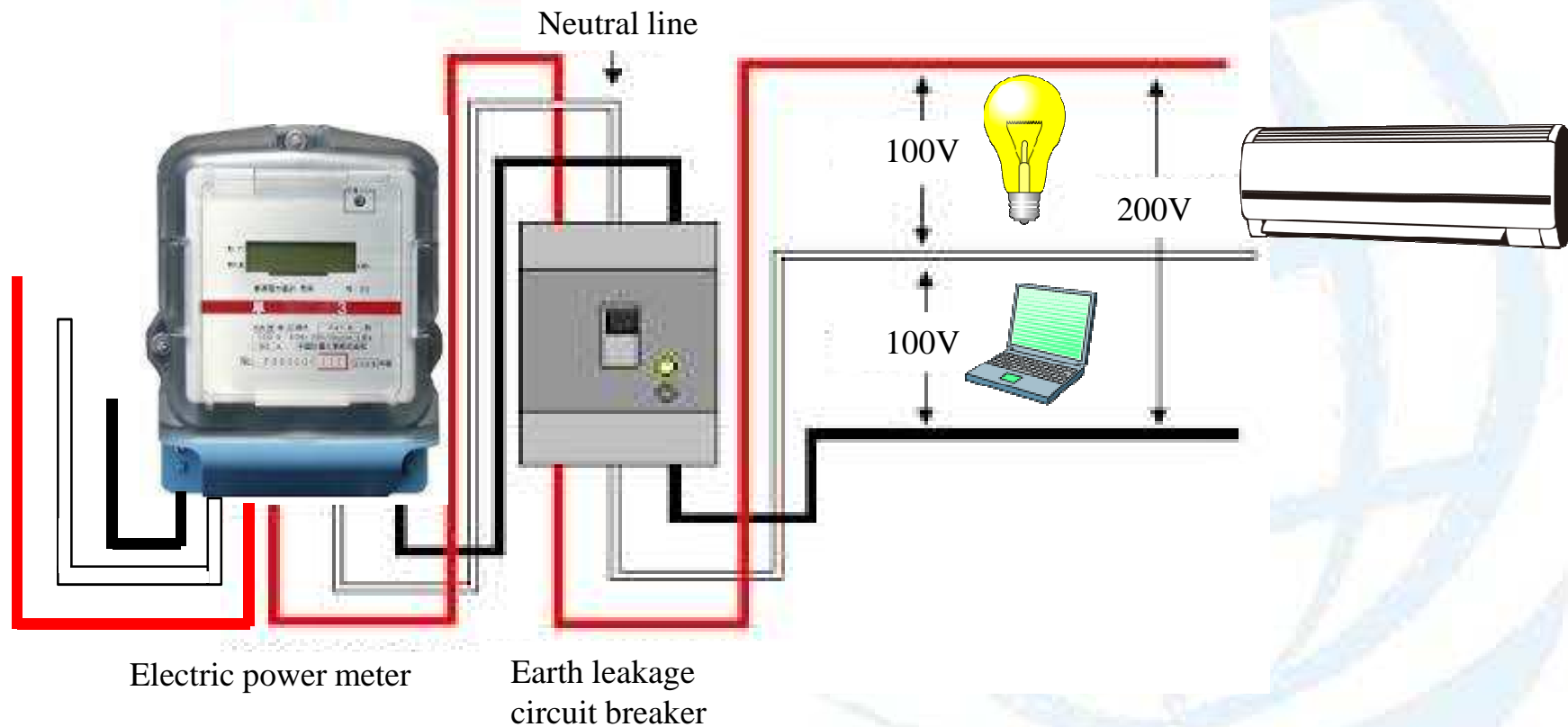
- Periodic survey  
Approx. 850,000 times/year
- Construction completion survey  
Approx. 250,000 times/year

(Number of surveyors: approx. 250 persons)

# Electrical wiring at general household



## Single-phase three-wire system 200V/100V wiring method





## Measuring instruments used for electrical safety survey at general households

Leakage current meter



Insulation resistance meter



Earth resistance meter



# Electrical safety survey using measuring instruments

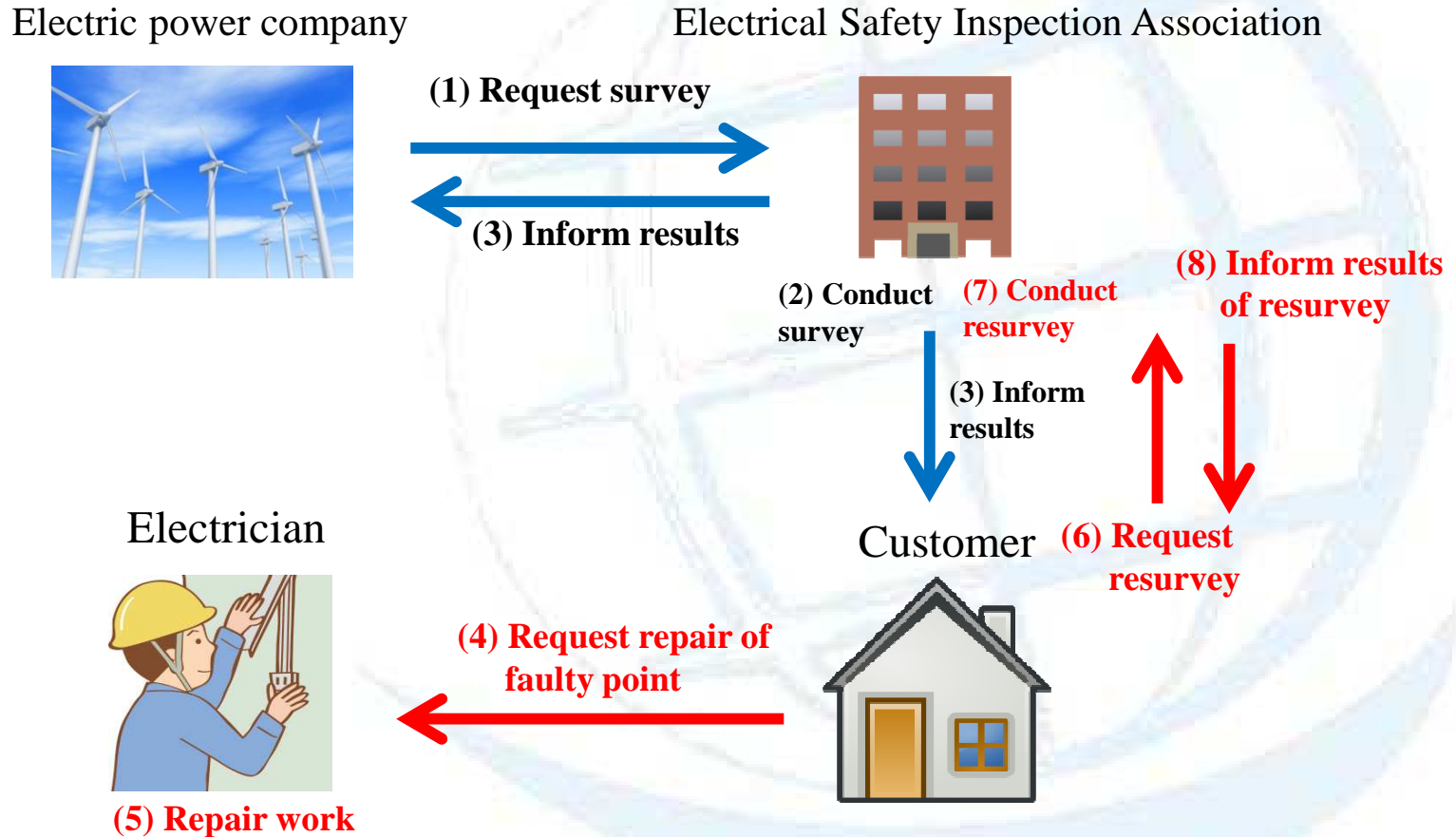
Insulation resistance measurement



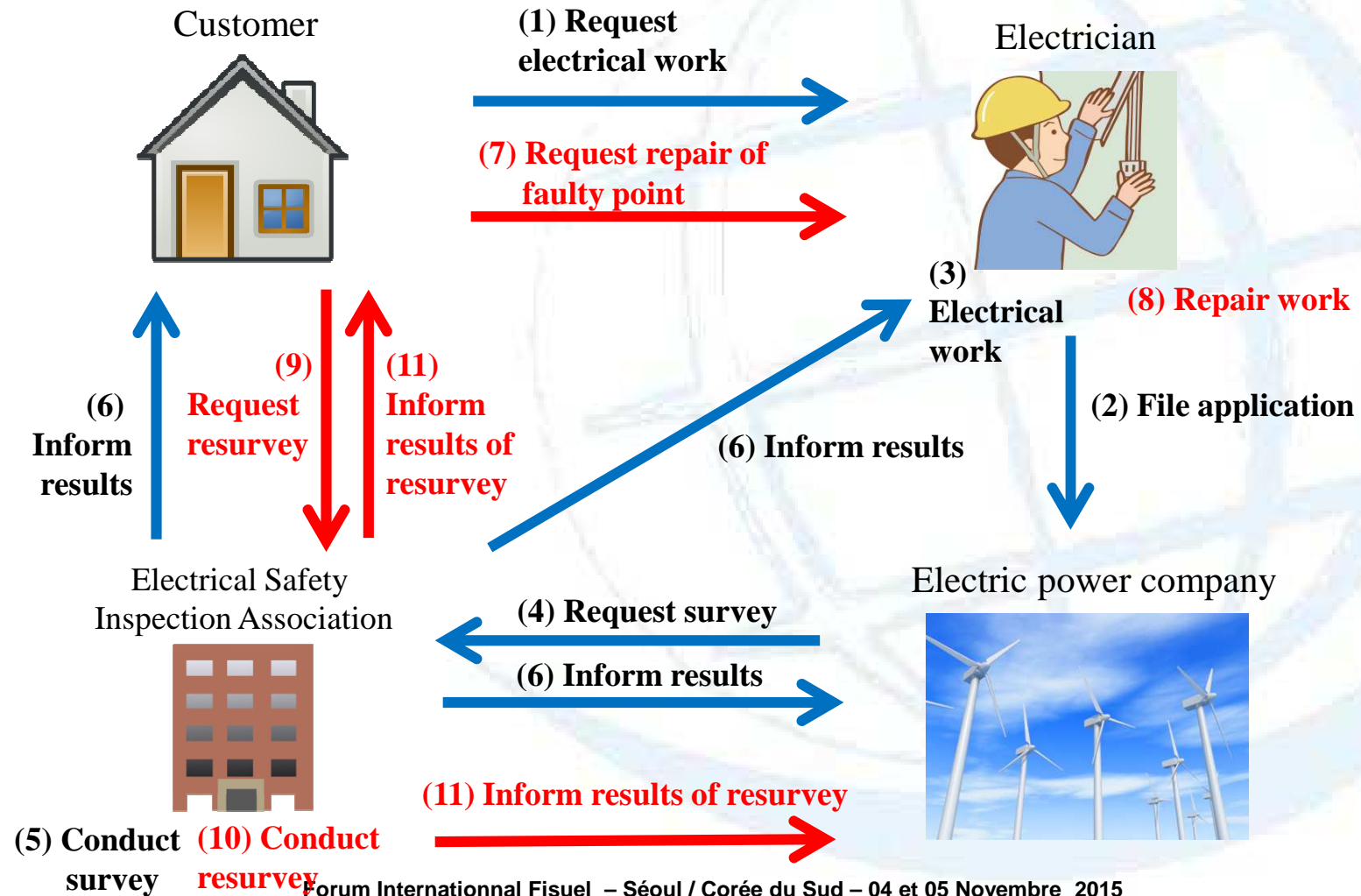
Leakage-current measurement



## Workflow of periodic survey



## Workflow of construction completion survey



# Mobile terminal device used by periodic surveyors

Appearance



Surveyors use mobile terminal devices to perform their jobs efficiently.

Initial screen

新調査業務実施メニュー	
100%	
調査員名: EUCテストA	
(お客さまデータ取込)	
調査区指定取込	
お客さま指定取込	
(調査業務)	
定期調査データ入力	
実績データ送信	
調査順序変更	
Ver 1.00	終了

Data entry screen (after entry)

判定	
お客さま名	名前0208135
種別・業種	
判定	
適合	
お知らせNo	
<input checked="" type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 指示数	1234
計器	057理由
	メモ
戻る	中止
	確定

Scene of using the mobile terminal device



# THANK YOU

**MERCI** - 감사합니다

